

**REMARKS**

The Applicant respectfully requests the Examiner's indulgence due to the transition of prosecuting attorneys this far into prosecution. While the present action may to a degree touch on issues previously argued, the Applicant believes the issues to not have been properly vetted and encourages the Examiner to reconsider allowability in light of the following arguments.

**Rejection of Claims under 35 U.S.C. § 103(a):**

In the Office Action, Examiner rejected claims 1-5, 7-10, 12-16, 18-20, 24, and 25 under 35 U.S.C. § 103(a) as being rendered obvious, and therefore unpatentable, by United States Patent Number 6,344,745 (hereinafter "Reisker") in view of United States Patent Number 5,194,811 ("Murphy-Boesch"), United States Patent Number 5,202,635 ("Srinivasan"), or United States Patent Number 6,788,058 ("Petropoulos"), and in further view of JP application 07001825. Also, in the Office Action, Examiner rejected claims 6, 11, 17, and 21-23 under 35 U.S.C. § 103(a) as being rendered obvious, and therefore unpatentable, by Reisker in view of Murphy-Boesch, Srinivasan, Petropoulos, or United States Patent Number 6,396,271 ("Burl") and in further view of JP application 07001825.

The present invention as is claimed in the present application recites at its base a drivable imaging coil with end rings greater in diameter to a central ring which is grounded and in some cases claimed to have low impedance. The Examiner in previous portions of prosecution has deemed the central ring surrounded on either side with larger circumference end rings to be obvious in light of Reisker in view of Murphy-Broesch, or Srinivasan or Petropolous. The Examiner's stated reasoning was that Reisker in column 9, lines 4-10 describes using tapered end rings larger than the center of the resonator. The Examiner uses this along with the references illustrating center rings as rendering the present invention obvious. The Applicant would like to request reconsideration from the Examiner.

Column 9, lines 4-10 recite "using end-rings, which are tapered larger rather than smaller (relative to the diameter of the center of the resonator) to provide a concentrated magnetic flux density with the region centered within the resonator." Reisker clearly teaches a reduced middle resonator to concentrate the magnetic flux in the center. Petropoulos on the

other hand, is directed towards attempting to generate improvements to the homogeneity of the field at the far end by way of tapering a series of rings. The other cited references are illustrative of the known two end rings/one center ring arrangement. As can be seen, there is no motivation to combine Petropoulos with Reisker as one is directed to concentrating the field, while the other is to smoothing an end transition of the field.

The present invention, however, by claiming a unique arrangement with a grounded center ring paired by way of a plurality of legs to two greater diameter end rings on either side provides unique improvements over Resiker, Petropoulos and the other cited references that are not an obvious combination or mere design consideration. Shortening the diameter of the center ring coupled with shorting it and in one embodiment also making it low impedance – provides symmetry to the magnetic field in the region between the end rings. In addition, the arrangement increases the impedance between the patient and the end rings allowing for minimized electromagnetic fields to be utilized. The structure of Reisker (directed to concentrating the field – not minimizing it), Petropoulos (concentrating on the unsymmetrical effects of the field at far ends), or any of the other cited references would not lead one skilled in the art to the claimed arrangement that both homogenizes the central portion of the imaging coil while minimizing the electric field on the patient. The cited references provide no motivation or suggestion to direct one skilled in the art to arrive at the claimed arrangement with its related benefits.

As such, the Examiner is respectfully requested to reconsider the rejections.

In view of the above, Applicants respectfully request that Examiner's rejection of claims 1-26 under 35 U.S.C. § 103(a) be withdrawn.

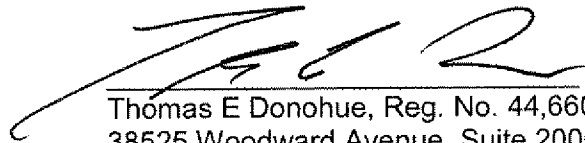
### **CONCLUSION**

In view of the claims as amended and also the forgoing remarks, Applicants respectfully submit that claims 1-26 are all novel and non-obvious with respect to the prior art of record. Therefore, Applicants respectfully request that all of Examiner's claim rejections in the Office Action be withdrawn and that a "Notice of Allowance" be issued for all claims 1-26.

Should Examiner have any questions with respect to any matter now of record, Examiner is invited to contact Applicants' undersigned attorney at (248) 433-7200.

Respectfully submitted,

**DICKINSON WRIGHT PLLC**

A handwritten signature in black ink, appearing to read 'T. E. Donohue', is written over a horizontal line.

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